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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/997,003

DATE: 08/09/2002 p6  
TIME: 14:56:28

Input Set : A:\PA003P1.seqList.txt

Output Set: N:\CRF4\08092002\I997003.raw

1 <110> APPLICANT: Rosen et al.  
 3 <120> TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
 5 <130> FILE REFERENCE: PA003P1  
 C--> 7 <140> CURRENT APPLICATION NUMBER: US/09/997,003  
 C--> 7 <141> CURRENT FILING DATE: 2001-11-30  
 7 <150> PRIOR APPLICATION NUMBER: unassigned  
 8 <151> PRIOR FILING DATE: 2001-11-30  
 10 <150> PRIOR APPLICATION NUMBER: PCT/US00/22157  
 11 <151> PRIOR FILING DATE: 2000-08-11  
 13 <150> PRIOR APPLICATION NUMBER: 60/148,680  
 14 <151> PRIOR FILING DATE: 1999-08-13  
 16 <160> NUMBER OF SEQ ID NOS: 56  
 18 <170> SOFTWARE: PatentIn Ver. 2.0  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 733  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Homo sapiens  
 25 <400> SEQUENCE: 1  
 26 gggatccgga gcccaaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60  
 27 aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120  
 28 tctcccggaac tcttgaggtc acatgcgttg tggtaggacgt aagccacgaa gaccctgagg 180  
 29 tcaagttcaa ctggtacgtg gacggcgttg aggtgcataa tgccaagaca aagccgcggg 240  
 30 aggagcagta caacagcacg taccgtgttg tcagcgctct caccgtcctg caccaggact 300  
 31 ggctgaatgg caaggagtac aagtgaagg tctccaacaa agccctccca acccccatcg 360  
 32 agaaaacccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420  
 33 catcccgga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480  
 34 atccaagcga catgcgcgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540  
 35 ccacgcctcc cgtgctggac tccgacggct ccttcttctct ctacagcaag ctaccgtgg 600  
 36 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660  
 37 acaaccacta cagcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720  
 38 gactctagag gat 733  
 40 <210> SEQ ID NO: 2  
 41 <211> LENGTH: 5  
 42 <212> TYPE: PRT  
 43 <213> ORGANISM: Homo sapiens  
 45 <220> FEATURE:  
 46 <221> NAME/KEY: Site  
 47 <222> LOCATION: (3)  
 48 <223> OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
 50 <400> SEQUENCE: 2  
 W--> 51 Trp Ser Xaa Trp Ser  
 52 1 ; 5  
 54 <210> SEQ ID NO: 3

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55 <211> LENGTH: 86
56 <212> TYPE: DNA
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <221> NAME/KEY: Primer_Bind
61 <223> OTHER INFORMATION: Synthetic sequence with 4 tandem copies of the GAS binding
site
62     found in the IRF1 promoter (Rothman et al., Immunity 1:457-468
63     (1994)), 18 nucleotides complementary to the SV40 early promoter,
64     and a Xho I restriction site.
66 <400> SEQUENCE: 3
67 ggcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc      60
68 cccgaaatat ctgccatctc aattag                                           86
70 <210> SEQ ID NO: 4
71 <211> LENGTH: 27
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <221> NAME/KEY: Primer_Bind
77 <223> OTHER INFORMATION: Synthetic sequence complementary to the SV40 promoter;
includes a
78     Hind III restriction site.
80 <400> SEQUENCE: 4
81 gcggcaagct ttttgcaaag cctaggc                                           27
83 <210> SEQ ID NO: 5
84 <211> LENGTH: 271
85 <212> TYPE: DNA
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <221> NAME/KEY: Protein_Bind
90 <223> OTHER INFORMATION: Synthetic promoter for use in biological assays; includes GAS
91     binding sites found in the IRF1 promoter (Rothman et al., Immunity
92     1:457-468 (1994)).
94 <400> SEQUENCE: 5
95 ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg      60
96 aaatatctgc catctcaatt agtcagcaac catagtcccc cccctaactc cgcccatccc      120
97 gccctaact ccgccagtt ccgccattc tccgcccatt ggctgactaa ttttttttat      180
98 ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt      240
99 ttttggaggc ctaggctttt gcaaaaagct t                                           271
101 <210> SEQ ID NO: 6
102 <211> LENGTH: 32
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <221> NAME/KEY: Primer_Bind
108 <223> OTHER INFORMATION: Synthetic primer complementary to human genomic EGR-1
promoter
109     sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
110     Xho I restriction site.
112 <400> SEQUENCE: 6
113 gcgctcgagg gatgacagcg atagaacccc gg                                           32
115 <210> SEQ ID NO: 7

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116 <211> LENGTH: 31
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <221> NAME/KEY: Primer_Bind
122 <223> OTHER INFORMATION: Synthetic primer complementary to human genomic EGR-1
promoter
123     sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
124     Hind III restriction site.
126 <400> SEQUENCE: 7
127 gcgaagcttc ggcactcccc ggatccgcct c                               31
129 <210> SEQ ID NO: 8
130 <211> LENGTH: 12
131 <212> TYPE: DNA
132 <213> ORGANISM: Homo sapiens
134 <400> SEQUENCE: 8
135 ggggactttc cc                                                       12
137 <210> SEQ ID NO: 9
138 <211> LENGTH: 73
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <221> NAME/KEY: Primer_Bind
144 <223> OTHER INFORMATION: Synthetic primer with 4 tandem copies of the NF-KB binding
site
145     (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the
146     SV40 early promoter sequence, and a XhoI restriction site.
148 <400> SEQUENCE: 9
149 gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg       60
150 ccatctcaat tag                                                       73
152 <210> SEQ ID NO: 10
153 <211> LENGTH: 256
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
157 <220> FEATURE:
158 <221> NAME/KEY: Protein_Bind
159 <223> OTHER INFORMATION: Synthetic promoter for use in biological assays; includes
NF-KB
160     binding sites.
162 <400> SEQUENCE: 10
163 ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct       60
164 caattagtag gcaaccatag tcccgcacct aactccgccc atcccgcccc taactccgcc       120
165 cagttccgcc cattctccgc cccatggctg actaatTTTT tttatttatg cagaggccga       180
166 ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg       240
167 cttttgcaaa aagctt                                                  256
169 <210> SEQ ID NO: 11
170 <211> LENGTH: 800
171 <212> TYPE: DNA
172 <213> ORGANISM: Homo sapiens
174 <400> SEQUENCE: 11
175 tcgaccacag cgtccgaact cagactcagc caacagagat tgttgatttg cctcttaagc       60
176 aagagattca ttgcagctca gcatggctca gaccagctca tacttcatgc tgatctcctg       120

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177 cctgatgttt ctgtctcaga gccaaaggcca agaggcccag acagagttgc cccaggcccg      180
178 gatcagctgc ccagaaggca ccaatgccta tcgctcctac tgctactact ttaatgaaga      240
179 ccgtgagacc tgggttgatg cagatctcta ttgccagaac atgaattcgg gcaacctggg      300
180 gtctgtgctc acccaggccg aggggtgcctt tgtggcctca ctgattaagg agagtggcac      360
181 tgatgacttc aatgtctgga ttggcctcca tgaccccaaa aagaaccgcc gctgggactg      420
182 gagcagtggg tccctgggtct cctacaagtc ctggggcatt ggagccccaa gcagtgttaa      480
183 tcctggctac tgtgtgagcc tgacctcaag cacaggattc cagaaatgga aggatgtgcc      540
184 ttgtgaagac aagttctcct ttgtctgcaa gttcaaaaac tagaggcagc tggaaaatac      600
185 atgtctagaa ctgatccagc aattacaacg gagtcaaaaa ttaaaccgga ccatctctcc      660
186 aactcaactc aacctggaca ctctcttctc tgctgagttt gccttgttaa tcttcaatag      720
187 ttttacctac cccagtcttt ggaaccctaa ataataaaaa taaacatgtt tccactatta      780
188 aaacaaaaaa aaaaaaaaaa                                800
190 <210> SEQ ID NO: 12
191 <211> LENGTH: 514
192 <212> TYPE: DNA
193 <213> ORGANISM: Homo sapiens
195 <400> SEQUENCE: 12
196 ccacgcgtcc gctgcactct cagggtattcc ctgctcttac tccaaaaaga tggacccagg      60
197 tccgaagggg cactgccact gtgggggggca tggccatcct ccaggtcact gcggggccacc      120
198 ccctggccat ggcccagggc cctgcggggc accccccccac catggcccag ggccctgcgg      180
199 gccaccccc caccatggtc caggggcctg cggggccacc cctggccatg gcccagggcc      240
200 ctgcggggcca cccccccacc atggtccagg gccctgcggg cctccccctg gccatggccc      300
201 aggtcaccca cccctggtc cacatcactg aggaagtaga agaaaacagg acacaagatg      360
202 gcaagcctga gagaattgcc cagctgacct ggaatgaggc ctaaaccaaca atcttctctt      420
203 cctaataaac agcctcctag aggccacatt ctattcttta aaaaaaaaaa aaaaaaaaaa      480
204 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                                514
206 <210> SEQ ID NO: 13
207 <211> LENGTH: 1893
208 <212> TYPE: DNA
209 <213> ORGANISM: Homo sapiens
211 <220> FEATURE:
212 <221> NAME/KEY: misc_feature
213 <222> LOCATION: (1184)..(1184)
214 <223> OTHER INFORMATION: n equals a,t,g, or c
216 <220> FEATURE:
217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (1865)..(1865)
219 <223> OTHER INFORMATION: n equals a,t,g, or c
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (1883)..(1883)
224 <223> OTHER INFORMATION: n equals a,t,g, or c
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (1887)..(1887)
229 <223> OTHER INFORMATION: n equals a,t,g, or c
231 <220> FEATURE:
232 <221> NAME/KEY: misc_feature
233 <222> LOCATION: (1893)..(1893)

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234 &lt;223&gt; OTHER INFORMATION: n equals a,t,g, or c

236 &lt;400&gt; SEQUENCE: 13

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237 cccacgcgtc cgcgagcgcg tgggcgcgcg ggagctggga ggctgcgaga tccctaccgc      60
238 agtagccgcc tctgccgcg cgagcttcc cgaacctctt cagccgcccg gagccgctcc      120
239 cggagcccg cgtagaggc tgcaatcgca gccgggagcc cgcagcccg gccccgagcc      180
240 cgcgcgcgcc cttcgaggc gccccaggcc gcgccatggt gaaggtgacg ttcaactccg      240
241 ctctggccca gaagggaggc aagaaggacg agcccaagag cggcgaggag gcgctcatca      300
242 tcccccccg cgccgtcgcg gtggactgca aggaccaga tgatgtgta ccagttggcc      360
243 aaagaagagc ctggtgttg tgcatgtgct ttggactagc atttatgctt gcaggtgta      420
244 ttctaggagg agcatacttg taaaaatatt ttgcaattca accagatgac gtgtactact      480
245 gtggaataaa gtacatcaaa gatgatgtca tcttaaata gacctctgca gatgccccag      540
246 ctgctctcta ccagacaatt gaagaaaata ttaaaatctt tgaagaagaa gaagttgaat      600
247 ttatcagtgt gcctgtccca gagtttgacg atagtgatcc tgccaacatt gttcatgact      660
248 ttaacaagaa acttacagcc tatttagatc ttaacctgga taagtgtat gtgatccctc      720
249 tgaacacttc cattgttatg ccaccagaa acctactgga gttacttatt aacatcaagg      780
250 ctggaacctc tttgcctcag tctatctga ttcattgagc catggttatt actgatcgca      840
251 ttgaaacat tgatcacctg ggtttcttta tttatcgact gtgtcatgac aaggaaactt      900
252 acaaactgca acgcagagaa actattaaag gtattcagaa acgtgaagcc agcaattgtt      960
253 tcgcaattcg gcattttgaa acaaaatttg ccgtggaaac ttaatttgt tcttgaacag      1020
254 tcaagaaaaa cattattgag gaaaattaat atcacagcat aacccacccc tttacatttt      1080
255 gtgcagtgat ttttttttaa agtcttcttt catgtaagta gcaaacaggg ctttactatc      1140
W--> 256 ttttcatctc attaatcaaa ttaaaacat taccttaaaa tttnaaaaaa aaaaaaaaaa      1200
257 aggcgcgcgc cgtctgcctc tccgccccgc gtccagctcg cccagctcgc ccagcgtccg      1260
258 ccgcgcctcg gccaaaggctt caacggacca caccaaaatg ccatctcaaa tggaaacagc      1320
259 catggaacc atgatgttta catttcacaa attcgtggg gataaaggct acttaacaaa      1380
260 ggaggacctg agagtactca tggaaaagga gttccctgga tttttggaaa atcaaaaaga      1440
261 cctctgggt gtggacaaaa taatgaagga cctggaccag tgtagagatg gcaaagtggg      1500
262 cttccagagc ttcttttccc taattgcggg cctcaccatt gcatgcaatg actattttgt      1560
263 agtacacatg aagcagaagg gaaagaagta ggcagaaatg agcagttcgc tctccctga      1620
264 taagagttgt cccaaagggt cgcttaagga atctgcccc cagcttcccc catagaagga      1680
265 tttcatgagc agatcaggac acttagcaaa tgtaaaaaa aaatctaact ctcatgtgac      1740
266 aagcagagaa agaaaagtta aataccagat aagcttttga tttttgtatt gtttgcatec      1800
267 ccttgccctc aataaataaa gttctttttt agttccaaaa aaaaaaaaaa ggcggccgtt      1860
W--> 268 taarngatcc aatttacgta ccntgcntgc gan      1893

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270 &lt;210&gt; SEQ ID NO: 14

271 &lt;211&gt; LENGTH: 1681

272 &lt;212&gt; TYPE: DNA

273 &lt;213&gt; ORGANISM: Homo sapiens

275 &lt;400&gt; SEQUENCE: 14

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276 gcccgtgag gacgcagcgt cagctgacct ggggagtcgc gattcgtgcc ggccggtcct      60
277 ggttctccgg tcccgcgcgt cccgcagcag ccatgtcgtt cttcccggag ctttacttta      120
278 acgtggacaa tggctacttg gagggactgg tgcgcggcct gaaggccggg gtgctcagcc      180
279 aggcgacta cctcaacctg gtgcagtgcg agacgctaga ggacttgaaa ctgcatctgc      240
280 agagcactga ttatggtaac ttcttgcca acgaggcatc acctctgacg gtgtcagtca      300
281 tcgatgaccg gctcaaggag aagatggtgg tggagtcccg ccacatgagg aacctgcct      360
282 atgagcctac cgccagcttc ctgacttca ttaettacag ttacatgatc gacaacgtga      420
283 tctgtctcat cacaggcacg ctgcaccagc gctccatcgc tgagctcgtg cccaagtgcc      480
284 acccactagg cagcttcgag cagatggagg ccgtgaacat tgctcagaca cctgctgagc      540
285 tctacaatgc cattctggtg gacaagcctc ttgcggcttt tttccaggac tgcatttcag      600

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RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 3  
Seq#:13; N Pos. 1184,1865,1883,1887,1893  
Seq#:24; N Pos. 812,822,829,838,841  
Seq#:25; N Pos. 329,332  
Seq#:27; N Pos. 738,771  
Seq#:28; N Pos. 1014  
Seq#:29; N Pos. 419  
Seq#:46; Xaa Pos. 215,216,227,236  
Seq#:47; Xaa Pos. 153

## VERIFICATION SUMMARY

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Input Set : A:\PA003P1.seqList.txt

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L:7 M:270 C: Current Application Number differs, Replaced Current Application No

L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1140

L:268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1860

L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:780

L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:840

L:569 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:300

L:615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:720

L:659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:960

L:686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:360

L:1305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:208

L:1308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:224

L:1351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:144